○ Yes Ex/SC ⊙ Yes ○ No

created via: HPDC Online Builder

HPD UNIQUE IDENTIFIER: 26428

CLASSIFICATION: 07 21 13.13 Foam Board Insulation

PRODUCT DESCRIPTION: SOPRA-XPS is an extruded polystyrene thermal insulation board used in roofs, walls and foundations. It is composed of a closed-cell, rigid extruded polystyrene foam core. Since October 2020, SOPRA-XPS is using Solstice GBA, a low-GWP, HFO-based blowing agent (HFO 1234ze).

Section 1: Summary

Basic Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format

- C Nested Materials Method
- Basic Method

Threshold Disclosed Per

- Material
- Product

Threshold Level

- C 100 ppm
- ⊙ 1,000 ppm
- O Per GHS SDS
- Other

Residuals/Impurities

- C Considered
- Partially Considered
- O Not Considered

Explanation(s) provided for Residuals/Impurities?

Yes ○ No

All Substances Above the Threshold Indicated Are:

Characterized

% weight and role provided for all substances.

All substances screened using Priority Hazard Lists with

results disclosed.

Screened

Identified ○ Yes Ex/SC ○ Yes ○ No

One or more substances not disclosed by Name (Specific or Generic) and Identifier and/ or one or more Special Condition did not follow guidance.

CONTENT IN DESCENDING ORDER OF QUANTITY

Summary of product contents and results from screening individual chemical substances against HPD Priority Hazard Lists and the GreenScreen for Safer Chemicals®. The HPD does not assess whether using or handling this product will expose individuals to its chemical substances or any health risk. Refer to Section 2 for further details.

MATERIAL | SUBSTANCE | RESIDUAL OR IMPURITY

GREENSCREEN SCORE | HAZARD TYPE

SOPRA-XPS [POLYSTYRENE LT-UNK 1,3,3,3-

TETRAFLUOROPROPENE, (1E)- (HFO 1234ZE) LT-UNK

UNDISCLOSED BM-2 | CAN | END | DEV | PHY | REP CARBON DIOXIDE (CARBON DIOXIDE) NoGS UNDISCLOSED LT-1 | PBT TALC BM-1 |

CAN STEARIC ACID LT-P1 | END WATER BM-4 CARBON BLACK BM-

1 | CAN]

Number of Greenscreen BM-4/BM3 contents ... 1

Contents highest concern GreenScreen

Benchmark or List translator Score ... BM-1

Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

SOPRA-XPS is available in seven (7) different levels of compressive strength (20, 25, 30, 35, 40, 60, and 100 psi) and in thicknesses from 25 to 102 mm (1 to 4 inches). Ranges were given to substance and ingredient percentages to cover all configurations. No substance other than those listed in this HPD have been added to the finished product during its manufacturing. Residuals could not be considered for all materials because information was not provided by all raw materials vendors.

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

VOC Content data is not applicable for this product category.

CERTIFICATIONS AND COMPLIANCE See Section 3 for additional

VOC emissions: CDPH Standard Method V1.2 (Section 01350/CHPS) -

Classroom & Office scenario

VOC emissions: UL/GreenGuard Gold Certified

Recycled content: ISO 14021:1999 Environmental labels and

declarations

Management: ISO 9001:2015 Quality management systems

No pre-checks completed or disclosed.

Third Party Verified?

O Yes

No

PREPARER: Self-Prepared

VERIFIER:

VERIFICATION #:

CONSISTENCY WITH OTHER PROGRAMS

SCREENING DATE: 2021-08-02 PUBLISHED DATE: 2021-11-04 EXPIRY DATE: 2024-08-02

Section 2: Content in Descending Order of Quantity

This section lists contents in a product based on specific threshold(s) and reports detailed health information including hazards. This HPD uses the inventory method indicated above, which is one of three possible methods:

- Basic Inventory method with Product-level threshold.
- Nested Material Inventory method with Product-level threshold
- Nested Material Inventory method with individual Material-level thresholds

Definitions and requirements for the three inventory methods and requirements for each data field can be found in the HPD Open Standard version 2.2, available on the HPDC website at: www.hpd-collaborative.org/hpd-2-2-standard

SOPRA-XPS

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Partially

RESIDUALS AND IMPURITIES NOTES: Residuals could not be considered for all substances because information was not provided by all raw materials vendors.

OTHER PRODUCT NOTES: Some substances are undisclosed to protect proprietary information.

POLYSTYRENE ID: 9003-53-6

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2021-08-02 19:37:15

%: 85.0000 - 95.0000 GS: LT-UNK RC: Both NANO: No SUBSTANCE ROLE: Polymer species

HAZARD TYPE AGENCY AND LIST TITLES WARNINGS

None found No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: SOPRA-XPS principal ingredient is polystyrene. The recycled content of this substance has been evaluated by a third party and is covered by an independent report.

1,3,3,3-TETRAFLUOROPROPENE, (1E)- (HFO 1234ZE)

ID: 29118-24-9

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2021-08-02 19:37:16

%: 2.0000 - 5.0000 GS: LT-UNK RC: None NANO: No SUBSTANCE ROLE: Blowing agent

HAZARD TYPE AGENCY AND LIST TITLES WARNINGS

None found No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: Blowing agent with a global warming potential (GWP) smaller than 1.

UNDISCLOSED ID: Undisclosed

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2021-08-02 19:37:16

%: 0.5000 - 4.0000 GS: BM-2 RC: None NANO: No SUBSTANCE ROLE: Blowing agent

| HAZARD TYPE | AGENCY AND LIST TITLES | WARNINGS |
|-------------|---------------------------------------|---------------------------------------------------------------------------------------|
| CAN | CA EPA - Prop 65 | Carcinogen - specific to chemical form or exposure route |
| END | TEDX - Potential Endocrine Disruptors | Potential Endocrine Disruptor |
| CAN | IARC | Group 1 - Agent is Carcinogenic to humans |
| CAN | MAK | Carcinogen Group 5 - Genotoxic carcinogen with very slight risk under MAK/BAT levels |
| DEV | CA EPA - Prop 65 | Developmental - specific to chemical form or exposure route |
| CAN | GHS - Japan | H350 - May cause cancer [Carcinogenicity - Category 1A] |
| РНҮ | EU - GHS (H-Statements) | H225 - Highly flammable liquid and vapour [Flammable liquids - Category 2] |
| REP | GHS - Japan | H360 - May damage fertility or the unborn child [Toxic to reproduction - Category 1A] |

SUBSTANCE NOTES: This substance is a low-GWP co-blowing agent.

CARBON DIOXIDE (CARBON DIOXIDE)

ID: 463-79-6

| HAZARD SCREENING METHOD: | Pharos Chemical and Materials Library | HAZARD SO | CREENING DA | TE: 2021-08-02 19:37:17 |
|---------------------------|---------------------------------------|-----------|-------------|---------------------------------------|
| %: 0.5000 - 4.0000 | GS: NoGS | RC: None | NANO: No | SUBSTANCE ROLE: Blowing agent |
| HAZARD TYPE | AGENCY AND LIST TITLES | WAR | NINGS | |
| None found | | | No warning | gs found on HPD Priority Hazard Lists |

SUBSTANCE NOTES: Blowing agent with a GWP of 1 (reference of the GWP scale).

| UNDISCLOSED | | | | | | | ID: Undisclosed |
|--------------------------|-----------------------------------------------|-------|------|---------------------------------|------------------|--------------|-----------------|
| HAZARD SCREENING METHOD: | Pharos Chemical and Materials Library | HAZA | RD S | CREENING DA | ATE: 2021 | -08-02 19: | 37:17 |
| %: 0.2000 - 3.0000 | GS: LT-1 | RC: N | one | NANO: No | SUBSTA | NCE ROLE: | Flame retardant |
| HAZARD TYPE | AGENCY AND LIST TITLES | | WAR | NINGS | | | |
| PBT | OSPAR - Priority PBTs & EDs & equival concern | ent | PBT | - Chemical fo | r Priority A | ction | |
| PBT | EHP - San Antonio Statement on BFRs CFRs | | | e retardant su range transpo | | lass of cond | cern for PB&T & |
| | | | | | | | |

SUBSTANCE NOTES: Non-HBCD additive to provide fire retardant performance to foam.

TALC ID: 14807-96-6

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2021-08-02 19:37:17

%: 0.1000 - 4.0000 GS: BM-1 RC: None NANO: No SUBSTANCE ROLE: Nucleating agent

| HAZARD TYPE | AGENCY AND LIST TITLES | WARNINGS |
|----------------------|-------------------------------------------------|----------------------------------------------------------------------------------------------|
| CAN | MAK | Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification |
| CAN | IARC | Group 2b - Possibly carcinogenic to humans |
| SUBSTANCE NOTES: Tal | c is used as an additive to control foam genera | ation. |

| STEARIC ACID | | | | ID: 57-11 |
|-----------------------------|-----------------------------------------------|-----------|-------------------|---------------------------|
| HAZARD SCREENING METHOD: | Pharos Chemical and Materials Library | HAZARD SC | REENING DATE: | 2021-08-02 19:37:18 |
| %: 0.1000 - 1.0000 | GS: LT-P1 | RC: None | NANO: No | SUBSTANCE ROLE: Lubricant |
| HAZARD TYPE | AGENCY AND LIST TITLES | WARN | IINGS | |
| END | TEDX - Potential Endocrine Disruptors | Poten | tial Endocrine Di | sruptor |
| SUBSTANCE NOTES: Stearic ac | cid is used in lubrication of extrusion proce | ss. | | |

| WATER | | | | | | ID: 77 | '32-18-5 |
|-----------------------------|---------------------------------------------|----------|------------|----------|--------------|---------------|-----------------|
| HAZARD SCREENING METHOD: | Pharos Chemical and Materials Library | HAZARD S | CREENING [| DATE: | 2021-08-02 | 19:37:18 | |
| %: Impurity/Residual | GS: BM-4 | RC: None | NANO: No | SUBS | STANCE ROL | E: Impurity/F | Residual |
| HAZARD TYPE | AGENCY AND LIST TITLES | WAF | RNINGS | | | | |
| None found | | | No warni | ings fou | und on HPD F | Priority Haza | rd Lists |
| SUBSTANCE NOTES: Water is r | present as an impurity in the co-blowing ag | ent. | | | | | |

| HAZARD SCREENING METHOD: | Pharos Chemical and Materials Library | HAZARD SC | REENING DATE: | 2021-08-02 19:37:19 |
|---------------------------|---------------------------------------|-----------------------------------------------------------------------------------------|--------------------|--------------------------------|
| %: 0.0100 - 0.5000 | GS: BM-1 | RC: None | NANO: No | SUBSTANCE ROLE: Pigment |
| HAZARD TYPE | AGENCY AND LIST TITLES | WARN | IINGS | |
| CAN | US CDC - Occupational Carcinogens | Occupational Carcinogen | | |
| CAN | MAK | Carcinogen Group 3B - Evidence of carcinogenic ef but not sufficient for classification | | |
| CAN | CA EPA - Prop 65 | Carcin route | ogen - specific to | o chemical form or exposure |
| CAN | IARC | - | 2B - Possibly ca | rcinogenic to humans - inhaled |

Section 3: Certifications and Compliance

This section lists applicable certification and standards compliance information for VOC emissions and VOC content. Other types of health or environmental performance testing or certifications completed for the product may be provided.

VOC EMISSIONS

CDPH Standard Method V1.2 (Section 01350/CHPS) - Classroom & Office scenario

CERTIFYING PARTY: Third Party ISSUE DATE: 2021-04- EXPIRY DATE: 2022-CERTIFIER OR LAB: UL

APPLICABLE FACILITIES: Sherbrooke, QC, Canada 26 04 - 29Environment

CERTIFICATE URL:

CERTIFICATION AND COMPLIANCE NOTES: SOPRA-XPS meets all requirements of CDPH standard method V1.2. Report number 1001148207-

3669765 from UL Environment.

VOC EMISSIONS

UL/GreenGuard Gold Certified

CERTIFYING PARTY: Third Party ISSUE DATE: 2019-04- EXPIRY DATE: 2022-CERTIFIER OR LAB: UL

APPLICABLE FACILITIES: Sherbrooke, QC, Canada 04-29 Environment

CERTIFICATE URL: https://spot.ul.com/mainapp/products/detail/5cd9cd5055b0e81d607f4174

CERTIFICATION AND COMPLIANCE NOTES: Certified to UL2818-2013. Certificate number 138124-420 from UL Environment.

RECYCLED CONTENT

ISO 14021:1999 Environmental labels and declarations

CERTIFYING PARTY: Third Party ISSUE DATE: EXPIRY DATE: CERTIFIER OR LAB: CT

APPLICABLE FACILITIES: Sherbrooke, QC, Canada 2021-10-01 2022-09-30 Consultant

CERTIFICATE URL: https://files.soprema.ca//2021-11-02/Recycled_Content_Certificate_SOPREMA_SOPRA-

XPS_2021_EN.pdf6181515b2cc81482d1f9043b4cc48b595d072ca527029.pdf

CERTIFICATION AND COMPLIANCE NOTES: Post-consumer recycled content of SOPRA-XPS ranges from 17% to 25% depending on the grade. Pre-consumer recycled content of SOPRA-XPS ranges from 26% to 38% depending on the grade. Total recycled content ranges from 43% to 63% as validated by an independent third party according to ISO 14020/21. The total recycled content of SOPRA-XPS including the recovery of scraps and non-compliant products in the manufacturing process ranges from 70% to 77%.

MANAGEMENT

ISO 9001:2015 Quality management systems

CERTIFIER OR LAB: SGS ICS **CERTIFYING PARTY: Third Party** ISSUE DATE: 2021-09- EXPIRY DATE: 2024-

APPLICABLE FACILITIES: Sherbrooke QC, Canada. 23 05-07

CERTIFICATE URL: https://www.soprema.ca/wp-

content/uploads/2021/10/SOPREMA-ISO-9001-FR-1.pdf

CERTIFICATION AND COMPLIANCE NOTES: Certificate number FR18/81842815.00. Although all the plants cited in this report are covered by the certification, the only plant that manufactures the product covered by this HPD is the plant in Sherbrooke QC, Canada.



Section 4: Accessories

This section lists related products or materials that the manufacturer requires or recommends for installation (such as adhesives or fasteners), maintenance, cleaning, or operations. For information relating to the contents of these related products, refer to their applicable Health Product Declarations, if available.

SOPRASEAL STICK FLASHPRO

HPD URL: No HPD Available

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

SOPRASEAL STICK FLASHPRO can be used to bridge joints of SOPRA-XPS if part of the air barrier assembly.

SOPRASEAL LM 200T HPD URL: No HPD Available

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

SOPRASEAL LM 200T can be used to adhere SOPRA-XPS on vertical surfaces.

Section 5: General Notes

Residuals could not be considered for all materials because information was not provided by all raw materials vendors. Since October 2020, SOPRA-XPS is using Solstice GBA, a low-GWP, HFO-based blowing agent (HFO 1234ze). SOPRA-XPS is fully compliant with all federal, provincial, and state regulations on the use of halocarbons.

MANUFACTURER INFORMATION

MANUFACTURER: Soprema ADDRESS: 1688 J-B Michaud St. Drummondville QC J2C 8E9, Canada

WEBSITE: www.soprema.ca

TITLE: Director, Standards & Scientific Affairs PHONE: 819 478 8166 x.3290

EMAIL: jfcote@soprema.ca

CONTACT NAME: Jean-François Côté

The listed contact is responsible for the validity of this HPD and attests that it is accurate and complete to the best of his or her knowledge.

KEY

Hazard Types

AQU Aquatic toxicity

CAN Cancer

DEV Developmental toxicity **END** Endocrine activity

EYE Eye irritation/corrosivity

GEN Gene mutation

GLO Global warming

LAN Land toxicity

MAM Mammalian/systemic/organ toxicity

MUL Multiple **NEU** Neurotoxicity

NF Not found on Priority Hazard Lists

OZO Ozone depletion

PBT Persistent, bioaccumulative, and toxic

PHY Physical hazard (flammable or reactive)

REP Reproductive

RES Respiratory sensitization

SKI Skin sensitization/irritation/corrosivity

UNK Unknown

GreenScreen (GS)

BM-4 Benchmark 4 (prefer-safer chemical)

BM-3 Benchmark 3 (use but still opportunity for improvement)

BM-2 Benchmark 2 (use but search for safer substitutes)

BM-1 Benchmark 1 (avoid - chemical of high concern)

BM-U Benchmark Unspecified (due to insufficient data)

LT-P1 List Translator Possible 1 (Possible Benchmark-1)

LT-1 List Translator 1 (Likely Benchmark-1)

LT-UNK List Translator Benchmark Unknown (the chemical is present on at least one GreenScreen Specified List, but the information contained within the list did not result in a clear mapping

to a LT-1 or LTP1 score.) NoGS No GreenScreen.

Recycled Types

PreC Pre-consumer recycled content

PostC Post-consumer recycled content

UNK Inclusion of recycled content is unknown

None Does not include recycled content

Other Terms:

GHS SDS Globally Harmonized System of Classification and Labeling of Chemicals Safety Data Sheet

Inventory Methods:

Nested Method / Material Threshold Substances listed within each material per threshold indicated per material Nested Method / Product Threshold Substances listed within each material per threshold indicated per product Basic Method / Product Threshold Substances listed individually per threshold indicated per product

Nano Composed of nano scale particles or nanotechnology

Third Party Verified Verification by independent certifier approved by HPDC

Preparer Third party preparer, if not self-prepared by manufacturer

Applicable facilities Manufacturing sites to which testing applies

The Health Product Declaration (HPD) Open Standard provides for the disclosure of product contents and potential associated human and environmental health hazards. Hazard associations are based on the HPD Priority Hazard Lists, the GreenScreen List Translator™, and when available, full GreenScreen® assessments. The HPD Open Standard v2.1 is not:

- a method for the assessment of exposure or risk associated with product handling or use,
- a method for assessing potential health impacts of: (i) substances used or created during the manufacturing process or (ii) substances created after the product is delivered for end use.

Information about life cycle, exposure and/or risk assessments performed on the product may be reported by the manufacturer in appropriate Notes sections, and/or, where applicable, in the Certifications section.

The HPD Open Standard was created and is supported by the Health Product Declaration Collaborative (the HPD Collaborative), a customer-led organization composed of stakeholders throughout the building industry that is committed to the continuous improvement of building products through transparency, openness, and innovation throughout the product supply chain.

The product manufacturer and any applicable independent verifier are solely responsible for the accuracy of statements and claims made in this HPD and for compliance with the HPD standard noted.